1,4-DIOXANE

SOP: TZ Osborne (TZO) Effluent Weekly Composite Sampling

General Information

- NCDEQ effluent composite sampling conducted per a phone call on 9-30-2019 from DEQ [Linda Culpepper and Regional Office] – Sampling began 10-7-2019
- Analytical Method: 40 CFR Part 136 EPA Method 624.1 [Note: Method 624.1 requires a grab sample. A composite sample cannot be used for eDMR reporting]
- Each day (Monday Friday, excluding holidays) laboratory staff will pour up one liter (1 L) of the TZO effluent composite sample using a one liter glass graduated cylinder and pour into an intermediate 10 L composite jug to be stored in the TZO laboratory walk-in refrigerator (<6°C without freezing)
- Chain of Custody (including sample times, temperature and pH) will be recorded on the daily samples and kept with the intermediate sample container
- On Friday, Greensboro laboratory staff will thoroughly mix the intermediate container and transfer an aliquot to a 1L container for storage
- Preservation All samples will be stored in the walk-in refrigerator at <6°C (without freezing).
- Aliquot composite samples will be retained (for NCDEQ) for one week beyond the date NCDEQ was notified by email of the Greensboro TZO effluent grab sample results for that week. [Retained ~3 weeks]

Sample Bottle Requirements

- 10 L jug for daily compositing of effluent
- 1 L container for storage of the weekly aliquot composite for NCDEQ
- NCDEQ will provide their own 4 VOA vials for each sample

T. Z. Osborne Effluent Sampling Location

- 24 hour TZ Osborne effluent sample is collected from the NPDES permit sampling point using an ISCO composite sampler.
- Composite effluent samples are delivered to the lab each morning by TZO operations staff, following all NCDEQ and EPA requirements.